ATTACHMENT 8

1   UNITED STATES DISTRICT COURT

2   NORTHERN DISTRICT OF CALIFORNIA

3   SAN JOSE DIVISION

4

5   CISCO SYSTEMS, INC.,   )
)
6   Plaintiff,   )
) Case No.
7   vs.   ) 5:14-cv-05344-BLF (PSG)
)
8   ARISTA NETWORKS, INC.,   )
)
9   Defendant.   )
     _____)

10

11

12   HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

13

14

15   VIDEOTAPED DEPOSITION OF KIRK LOUGHEED

16   Palo Alto, California

17   Friday, November 20, 2015

18   Volume I

19

20

21

22   Reported by:
      CARLA SOARES
23   CSR No. 5908

24   Job No. 2187110

25   Pages 1 - 189

                                         Page 1

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

```
 1      UNITED STATES DISTRICT COURT
 2      NORTHERN DISTRICT OF CALIFORNIA
 3         SAN JOSE DIVISION
 4
 5  CISCO SYSTEMS, INC.,    )
                           )
 6       Plaintiff,  )
                    ) Case No.
 7     vs.        ) 5:14-cv-05344-BLF (PSG)
                    )
 8  ARISTA NETWORKS, INC.,   )
                    )
 9       Defendant.  )
    _____)
10
11
12
13
14
15
16     VIDEOTAPED DEPOSITION OF KIRK LOUGHEED,
17  Volume I, taken on behalf of Defendant, at
18  650 Page Mill Road, Palo Alto, California, beginning
19  at 9:19 a.m., and ending at 6:15 p.m., on Friday,
20  November 20, 2015, before CARLA SOARES, Certified
21  Shorthand Reporter No. 5908.
22
23
24
25
                                        Page 2
```

```
 1  APPEARANCES (Continued):
 2
 3  For the Defendant:
 4      KEKER & VAN NEST LLP
 5      BY:  BRIAN L. FERRALL, Attorney at Law
 6      BY:  RYAN WONG, Attorney at Law
 7      633 Battery Street
 8      San Francisco, California 94111
 9      415.391.5400
10      bferrall@kvn.com
11      rwong@kvn.com
12
13  ALSO PRESENT:  Sean Grant, Video Operator
14          --o0o--
15
16
17
18
19
20
21
22
23
24
25
                                        Page 4
```

```
 1  APPEARANCES:
 2
 3  For the Plaintiff and the Witness:
 4      QUINN EMANUEL URQUHART & SULLIVAN, LLP
 5      BY:  JOHN (JAY) NEUKOM, Attorney at Law
 6      50 California Street, 22nd Floor
 7      San Francisco, California 94111
 8      415.875.6341
 9      johnneukom@quinnemanuel.com
10        and
11      KIRKLAND & ELLIS LLP
12      BY:  JOSHUA L. SIMMONS, Attorney at Law
13      601 Lexington Avenue
14      New York, New York 10022
15      212-446-4989
16      joshua.simmons@kirkland.com
17
18
19
20
21
22
23
24
25
                                        Page 3
```

```
 1            INDEX
 2  WITNESS
 3  KIRK LOUGHEED               EXAMINATION
    Volume I
 4
 5      BY MR. FERRALL           10
 6
 7          EXHIBITS
 8  NUMBER        DESCRIPTION         PAGE
 9  Exhibit 29  Document headed "Internet      73
10      Protocol,"
11      Bates ARISTANDCA0031553 - 1601
12
13  Exhibit 30  Document headed "DoD Internet    73
14      Host Table Specification"
15
16  Exhibit 31  Document headed "An Ethernet     73
17      Address Resolution Protocol or
18      Converting Network Protocol
19      Addresses to 48.bit Ethernet
20      Address for Transmission on
21      Ethernet Hardware,"
22      Bates ARISTANDCA0003130 - 1639
23
24
25
                                        Page 5
```

2 (Pages 2 - 5)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

```
 1              EXHIBITS
 2 NUMBER          DESCRIPTION            PAGE
 3 Exhibit 32   Document headed "Address        85
 4              Resolution Protocol (ARP) module
 5              for the Yeager gateway"
 6
 7 Exhibit 33   Email string, top email to Kirk    89
 8              Lougheed and Paula Labloner from
 9              Mike Sanchez, dated 11-17-14,
10              Bates CSI-CLI-01326834 - 6837
11
12 Exhibit 34   Email string, top email to Phillip  93
13              Remaker from Kirk Lougheed, dated
14              3-30-10, Bates CSI-CLI-01317865 -
15              7866
16
17 Exhibit 35   Email string, top email to Joe     100
18              Hielscher from Kirk Lougheed,
19              dated 7-23-08,
20              Bates  CSI-CLI-01134849 - 4850
21
22 Exhibit 36   Document entitled "Stanford        101
23              Ethertip/Gateway User and
24              Configuration Guide,"
25              Bates CSI-CLI-01315523 - 5568
                                        Page 6
```

```
 1              EXHIBITS
 2 NUMBER          DESCRIPTION            PAGE
 3 Exhibit 43   Document entitled "DECbrouter 90   181
 4              Products," Bates CSI-ANI-00081683 -
 5              1683.000344
 6
 7              --o0o--
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
                                        Page 8
```

```
 1              EXHIBITS
 2 NUMBER          DESCRIPTION            PAGE
 3 Exhibit 37   Document entitled "cisco Systems   106
 4              AGS User Manual,"
 5              Bates CSI-CLI-00358166 - 8223
 6
 7 Exhibit 38   Email string, top email to Phillip 122
 8              Remaker from Kirk Lougheed, dated
 9              12-11-08, Bates CSI-ANI-00043306 -
10              3306.000001
11
12 Exhibit 39   Document entitled "Cisco's         152
13              Response to Arista's Interrogatory
14              No. 16 Amended Exhibit D1 (IOS
15              Release 11.0)"
16
17 Exhibit 40   Email to Craig Fox from Kirk        160
18              Lougheed, dated 3-6-96,
19              Bates CSI-CLI-00746398
20
21 Exhibit 41   Document described as source        162
22              code file
23
24 Exhibit 42   Document described as code          177
25
                                        Page 7
```

```
 1        Palo Alto, California          08:37:04
 2        Friday, November 20, 2015
 3            9:19 a.m.
 4
 5        P R O C E E D I N G S          08:37:10
 6        THE VIDEO OPERATOR:  Good morning.  We're
 7 on the record.  The time is 9:19 a.m., and the date
 8 is November 20th, 2015.  This begins the videotaped
 9 deposition of Kirk Lougheed.
10        My name is Sean Grant, here with our court    09:19:25
11 reporter, Carla Soares.  We're here from Veritext
12 Legal Solutions at the request of counsel for
13 defendant.
14        This deposition is being held at Wilson
15 Sonsini in Palo Alto, California.  The caption of    09:19:34
16 this case is Cisco Systems, Inc., versus Arista
17 Networks, Inc., Case No. 5:14-CV-05344-BLF.
18        Please note that audio- and
19 video-recording will take place unless all parties
20 have agreed to go off the record.  Microphones are    09:19:54
21 sensitive and may pick up whispers, private
22 conversations, or cellular interference.
23        At this time, will counsel please identify
24 themselves and state whom they represent.
25        MR. FERRALL:  Brian Ferrall of Keker &    09:20:06
                                        Page 9
```

3 (Pages 6 - 9)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

1   A   Could you explain to me what you mean by   11:09:26
2 "parser"?
3   Q   Do you know what a parser is?
4   A   I know in a generic sense what a parser
5 is.   11:09:45
6   Q   What's a parser in your -- based on your
7 understanding?
8   A   A parser is something that takes a string
9 of text and divides it up into a sequence of tokens,
10 and then takes some action based on those sequence   11:10:09
11 of tokens.
12   Q   Based upon that understanding, do you know
13 whether EXEC had a parser?
14   A   Yes.
15   Q   It did?   11:10:25
16   A   It did.
17   Q   How do you know that it had a parser?
18   A   Because it had the behavior that I
19 described.
20   Q   Had you ever seen the EXEC source code?   11:11:03
21   A   Yes.
22   Q   And had you seen the parser code of EXEC?
23   A   I had seen parts of it.
24   Q   How did you come to see that code?
25   A   It was -- Stanford had a source license to   11:11:33

Page 54

19   Q   Are you familiar with the syntax of
20 TOPS-20 commands?   11:17:00
21   A   In a -- yes.
22   Q   Can you explain what it is?
23   A   There are many commands. I do not
24 remember all of them.
25   Q   Was there a general format for TOPS-20   11:17:37

Page 56

Page 55

1 commands, to your recollection?   11:17:42
2   A   Yes.
3   Q   What was that format?
4   A   Again, there are many commands, and I
5 don't remember all the details of those commands.   11:18:10
6   Q   Okay. Do you -- I was trying to get
7 beyond that by asking you a general question about
8 the format that might be applicable to a range of
9 commands.
10   Is there such a thing, to your knowledge?   11:18:27
11   MR. NEUKOM: Objection to form. Vague.
12   THE WITNESS: The -- the EXEC -- the
13 number of such commands was large and varied. And
14 DEC appeared to have a standard way of doing things,
15 but I don't remember all the details.   11:18:55
16 BY MR. FERRALL:
17   Q   Okay. Can you tell me anything you
18 remember about the way TOPS-20 commands were
19 formatted as a general matter?
20   MR. NEUKOM: Objection to form.   11:19:20
21   THE WITNESS: There would be a leading
22 keyword, perhaps one or two leading keywords. There
23 was -- to help people along, you could hit an
24 "escape" key. You would complete -- it might print
25 out something called a guide word.   11:20:05

Page 57

15 (Pages 54 - 57)

1 exhibit.   14:20:06
2   (Exhibit 37 was marked for identification
3   and is attached hereto.)
4 BY MR. FERRALL:
5   Q   We've marked as Exhibit 37 a document   14:20:18
6 entitled "cisco Systems AGS User Manual System
7 Version 6.0." It bears control numbers
8 CSI-CLI-00358166 to 222.
9   Do you recognize Exhibit 37?
10   A   I do.   14:20:38
11   Q   Did you help prepare it?
12   A   I did.
13   Q   And this is -- this is the manual that
14 accompanied Version 6 of Cisco's software release;
15 is that correct?   14:20:58
16   A   Correct.
17   Q   Do you recall who else would have helped
18 you prepare Exhibit 37?
19   A   I believe I was the sole author.
20   Q   Who -- strike that.   14:22:42
21   IOS has different modes, correct?
22   MR. NEUKOM: Objection. Vague, compound.
23   THE WITNESS: Yes.
24 BY MR. FERRALL:
25   Q   In the current version of IOS, how many   14:23:18

Page 106

1 different modes are there?   14:23:20
2   A   A lot.
3   Q   Do you know how many?
4   A   No, not at present.
5   Q   More than five?   14:23:44
6   A   Yes.
7   Q   More than ten?
8   A   Probably.
9   Q   Were there different modes in the
10 original -- actually, strike that.   14:24:04
11   Let me ask terminology.
12   What did you call the original Cisco
13 software before it became known as IOS?
14   A   The gateway software. The router
15 software. The terminal server software. The AGS   14:24:25
16 software. There was no branding.
17   Q   This Exhibit 37 refers to "AGS User
18 Manual."
19   What does AGS stand for?
20   A   Advanced gateway server.   14:24:45
21   Q   Okay. At the time of Version 6 of the
22 Cisco software, how many different modes were there,
23 do you know?
24   A   So I don't understand how you're using the
25 word "mode."   14:25:21

Page 107

1   Q   Did Cisco use the word "mode" in   14:25:27
2 describing its functionality of its software?
3   A   We had -- there would be -- the phrase
4 "configuration mode" was certainly being used at
5 this time.   14:25:46
6   Q   Okay. And how did -- how did
7 "configuration mode" differ from any other mode of
8 operation?
9   A   It allowed you to type in command
10 expressions that affected the configuration of the   14:26:04
11 system.
12   Q   And if you weren't in configuration mode,
13 how would you describe whatever mode you were in?
14   A   You were -- at this time you would have
15 said you are at the EXEC.   14:26:32
16   Q   What does "EXEC" mean?
17   A   It was the term that I chose to refer to
18 the -- all the stuff that wasn't the configuration
19 mode.
20   Q   Give me an example of what that stuff is   14:27:08
21 or was.
22   A   The commands for connecting to other
23 computers on the network, the class of command
24 expressions that we call the "show" commands.
25   Basically the set of commands that did not   14:27:48

Page 108

1 reveal -- basically mostly status commands and ones   14:27:53
2 for handling connections over the network to other
3 hosts, sort of a subset of the -- of the terminal
4 server commands.
5   Q   And you said you chose the term "EXEC,"   14:28:26
6 that's E-X-E-C; is that right?
7   A   Yes.
8   Q   You chose that term, yes?
9   A   Yes.
10   Q   How did you come up with that term?   14:28:39
11   A   Well, I had a number of possible ways of
12 describing it. I could have used "shell" after
13 the -- modeling it along the UNIX way of -- UNIX
14 equivalent.
15   From -- I decided EXEC in sort of -- you   14:29:15
16 know, inspired by the TOPS-20 command processor.
17 You know, calling it the command processor would
18 have been another possibility.
19   There was a number of possibilities that I
20 could have called it, what I could have called that   14:29:38
21 particular part of the software, and I ended up
22 choosing EXEC.
23   Q   Now, were you responsible for determining
24 the prompt symbol on the interface?
25   I'm sorry. Let me be clear.   14:30:26

Page 109

28 (Pages 106 - 109)

1   I'm talking about on the interface line,   14:30:28
2 there are symbols that precede the input point, such
3 as a hash sign, for example, right?
4   A So for -- I was responsible for choosing
5 the prompts for the command line interface, for the   14:30:45
6 CLI.
7   Q Okay. And tell me what those prompts are,
8 the various prompts that the Cisco CLI uses.
9   A There are many right now. But at the time
10 there was the -- the unprivileged EXEC commands, and   14:31:09
11 that was the host name of the -- of the router or --
12 of the router, followed by a close angle bracket.
13   There was a privileged mode, and it
14 changed that prompt to a hash mark.
15   And in the initial implementation of   14:31:55
16 configuration mode, there was no prompt.
17   Q Okay. How did you choose the hash prompt
18 for the privileged mode?
19   A It was visually large and different than
20 the -- different -- just different than the   14:32:25
21 unprivileged EXEC prompt.
22   Q Okay. How did you use the unprivileged
23 close angle bracket prompt?
24   A I don't understand your question.
25   Q Did you choose to use the close angle   14:32:59

Page 110

1 bracket prompt?   14:33:02
2   A Router name, close angle bracket.
3   Q Right.
4   A Yes, I chose that.
5   Q Okay. How did you come to choose that?   14:33:09
6   A Well, there were -- when you have multiple
7 devices on a network, one of the first things you
8 want to know if you're typing at something is to
9 what you are typing at. So that -- sort of the most
10 aesthetic choice was the -- was the name of the   14:33:51
11 device.
12   And the angle bracket was a nice visual
13 way of terminating -- you know, here's where your
14 type-in begins. Here's where the prompt ends,
15 here's where the type-in begins.   14:34:19
16   Q Had you ever seen the angle bracket used
17 as a prompt in any other system?
18   A I wasn't aware of any generally available
19 host -- general purpose timesharing that actually
20 that was the default, that was the prompt.   14:34:56
21   Q I'm not sure what you mean by that.
22   But had you ever seen any system that used
23 a close angle bracket as a prompt?
24   A No. TOPS-20 used an "at" sign and UNIX
25 used a percent sign.   14:35:19

Page 111

1   Q And you're not aware of any use of a hash   14:35:22
2 sign as a prompt?
3   A Not to my recollection.
4   Q You were familiar with UNIX in the mid
5 1980s, right?   14:36:18
6   A As a user of UNIX.
7   Q And -- by the way, are you familiar with
8 Linux?
9   A Only as a user.
10   Q When did you first become familiar with   14:36:38
11 Linux?
12   A With Linux? I think I first heard mention
13 of it in the late '90s.
14   Q Did Cisco come up with the nomenclature of
15 calling a mode "privileged," to your knowledge?   14:38:02
16   A I don't believe -- I don't believe Cisco
17 came up with that terminology.
18   Q Let me turn to the current set of IOS CLI
19 commands.
20   I don't expect an exact number, but do you   14:38:54
21 know approximately how many IOS CLI commands there
22 are today?
23   A I would have to guess. It is a -- it's a
24 very large number.
25   Q Can you just give me a ballpark?   14:39:15

Page 112

1   A I believe it's in the low thousands.   14:39:20
2   Q Do you know if it's more or less than
3 5,000?
4   A No, I don't. I've not counted it. I've
5 not -- I've not counted it, nor have I heard of   14:39:43
6 somebody who has counted how many there are and how
7 many variations there are in total.
8   Q What is IOS XR?
9   MR. NEUKOM: Objection. Asked and
10 answered.   14:40:16
11   THE WITNESS: IOS XR is a Cisco-developed
12 variant of IOS for the -- for the service provider
13 marketplace.
14 BY MR. FERRALL:
15   Q Does IOS XR have a different set of CLI   14:40:43
16 commands?
17   A It has --
18   Q From IOS, that is.
19   A It is substantially the same. There is
20 functionality that exists only for a service   14:41:02
21 provider that has commands that are not contained in
22 the other variants of IOS.
23   Q What is IOS XE?
24   A That is a variant of IOS.
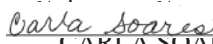25   Q What's the purpose of that variant?   14:41:27

Page 113

29 (Pages 110 - 113)

1   Q Why did you feel that way?   14:51:39
2   A Because the changes that I had in mind
3 were basically minor tweaks that didn't add value.
4   Q Do Cisco customers invest in training to
5 become familiar with Cisco's CLI?   14:52:24
6   MR. NEUKOM: Objection. Vague, compound
7 and foundation.
8   THE WITNESS: I have no reason to believe
9 that they don't.
10 BY MR. FERRALL: 14:52:41
11   Q Do you know that they do?
12   MR. NEUKOM: Same objections.
13   THE WITNESS: I don't have direct
14 experience with customers' network operations.
15 BY MR. FERRALL: 14:52:59
16   Q Well, but you're familiar with the whole
17 Cisco certification process, aren't you?
18   A I know of it.
19   MR. NEUKOM: Objection. Vague.
20 BY MR. FERRALL: 14:53:13
21   Q What is that process? Can you tell me
22 what you know about it?
23   A It is a set of training and a
24 certification that you have understood the training
25 involved in networking.   14:53:29

Page 118

1   Q What's Cisco's role in -- strike that.   14:53:35
2   What are the levels of certification one
3 can get from that training, do you know?
4   A I do not know.
5   Q Have you ever heard of the term CCIE?   14:53:51
6   A Yes, I have.
7   Q What's that?
8   A I believe it's Cisco certified Internet
9 engineer. I'm not sure.
10   Q Do you know what Cisco's role is in   14:54:10
11 determining that certification for a CCIE?
12   A I'm not familiar with the details of that
13 program.
14   Q Does Cisco itself provide training?
15   MR. NEUKOM: Objection. Vague.   14:54:35
16 BY MR. FERRALL:
17   Q Training to learn how to use Cisco devices
18 and use the CLI?
19   A Not for customers. I don't believe it
20 provides training for customers.   14:54:53
21   Q Do you think that the Cisco CLI has value
22 to Cisco?
23   MR. NEUKOM: Objection. As phrased, calls
24 for opinion. Also, vague and compound.
25   THE WITNESS: Yes, it has value.   14:55:21

Page 119

1 BY MR. FERRALL: 14:55:22
2   Q In what ways does it have value for Cisco?
3   MR. NEUKOM: Same objections.
4   THE WITNESS: It is the -- it's the look
5 and feel of Cisco router software.   14:55:38
6 BY MR. FERRALL:
7   Q Why is that valuable?
8   MR. NEUKOM: Objection. Calls for
9 opinion, and vague.
10   THE WITNESS: It lets customers know what 14:56:11
11 they are getting.
12 BY MR. FERRALL:
13   Q Can you explain that more? How does a CLI
14 command set let customers know what they are
15 getting?   14:56:37
16   A There is a -- it's a look and feel that
17 long-time customers are familiar with, are
18 comfortable with, and it represents that this is
19 a -- this is a Cisco product, not necessarily
20 somebody else's product.   14:57:24
21   MR. NEUKOM: Brian, whenever you think is
22 a good time. I think we've been going about an
23 hour.
24   MR. FERRALL: Okay. Okay. We can take a
25 break.   14:58:04

Page 120

1   THE VIDEO OPERATOR: Going off the record,   14:58:06
2 the time is 2:58 p.m.
3   (Recess, 2:58 p.m. - 3:24 p.m.)
4   THE VIDEO OPERATOR: Back on the record.
5 The time is 3:24 p.m.   15:24:02
6 BY MR. FERRALL:
7   Q Mr. Lougheed, when did you first become
8 aware of DOS, D-O-S?
9   A I'd say whose DOS?
10   Q MS-DOS.   15:24:36
11   A MS-DOS? I probably heard about it when
12 IBM announced the IBM PC.
13   Q Do you recall that MS-DOS uses a close
14 angle bracket as a prompt?
15   A Now that you remind me, it does.   15:25:16
16   Q Do you think you might have been inspired
17 by that prompt when you chose the close angle
18 bracket for Cisco's prompt?
19   A No. I was not a DOS user.
20   Q So it's just a coincidence that you and   15:25:34
21 DOS came up with the same prompt, to your knowledge?
22   MR. NEUKOM: Objection. Asked and
23 answered.
24   THE WITNESS: I was not a DOS user. I
25 first -- I was not a DOS user.   15:26:06

Page 121

31 (Pages 118 - 121)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

1   Q So in this case, there's a command, for   16:40:25
2 example, "clear ARP-cache," right?
3   A Yes.
4   Q In that command, is that the ARP cache
5 that's being cleared?   16:40:55
6   A I believe that command clears -- clears
7 all address resolution caches. There's more than
8 one address resolution protocol in the system, or at
9 least there was when we were a primarily
10 multi-protocol router.   16:41:19
11   Q Okay. If you go to page 6, the next page,
12 now, for this, "interface Ethernet," is that a
13 hierarchy?
14   A It is --
15   MR. NEUKOM: Objection. Calls for opinion 16:42:27
16 testimony.
17   THE WITNESS: It is the leading element of
18 a hierarchy.
19   One of the choices that I made at Stanford
20 actually in introducing the "interface" command was 16:42:49
21 that it assumed a block structure where I could say
22 things like "interface Ethernet zero," and then I
23 could say -- I could have a bunch of -- at Stanford
24 I had a bunch of what we called interface sub
25 commands that would follow on subsequent lines. 16:43:17

Page 154

1   I could very well have made the choice to   16:43:21
2 write that as, on one line, for example, "interface
3 Ethernet zero address," an IP address, a subnet
4 mask, and you would have a hierarchy of
5 configuration stuff.   16:43:44
6   Going outside into Cisco, you could have
7 "interface Ethernet zero." I could have "IP" and
8 then a bunch of IP keywords after that. I could
9 have "interface Ethernet zero DECnet" and have a
10 bunch of DECnet keywords underneath that. And that 16:44:00
11 would very clearly demonstrate a hierarchy.
12   I made the aesthetic choice of saying --
13 of turning the word "interface" -- which I could
14 have chosen something like "IF" or "net-in" or
15 something like that, but I chose "interface" -- I   16:44:23
16 like writing words out -- I chose as a typing
17 shorthand to say this is the front end of all -- of
18 the hierarchy for all the rest of these commands.
19   So this does -- it is a hierarchy,
20 especially in the Cisco multi-protocol world that it 16:44:47
21 evolved into.
22 BY MR. FERRALL:
23   Q So I'm trying to understand the nature of
24 your hierarchy.
25   You said, for example, you could have used 16:45:50

Page 155

1 "IF" instead of "interface."   16:45:51
2   A It was just an example of choice of --
3 choice of word.
4   But under discussion was rather what was a
5 hierarchy here. And these are the -- "interface"   16:46:05
6 with an argument after it is the first part of a
7 hierarchy.
8   You could draw this in a tree shape, and
9 it would be -- the hierarchy would be very obvious.
10   Q So is it still -- would it still be using   16:46:36
11 your hierarchy if this command were "IF Ethernet"?
12   MR. NEUKOM: Objection. Calls for
13 speculation, vague.
14   THE WITNESS: There's many other pieces to
15 the -- there are many other pieces to the hierarchy.   16:47:00
16 This is -- I was aiming for a hierarchical,
17 symmetric, aesthetically pleasing set of
18 configuration command expressions.
19 BY MR. FERRALL:
20   Q Tell me about -- what's aesthetically   16:47:28
21 pleasing about this command expression "interface
22 Ethernet"?
23   MR. NEUKOM: Objection. Calls for opinion
24 testimony.
25   THE WITNESS: This is a command fragment.   16:47:44

Page 156

1 This is the leading part of a command. There's more   16:47:45
2 to it than this.
3   MR. NEUKOM: Brian, I think at this point
4 we're coming up on an hour and a half. Do you mind
5 if we take a short break?   16:48:05
6   MR. FERRALL: Well, let me just ask one
7 more question.

Page 157

40 (Pages 154 - 157)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

1 The time is 5:13 p.m.   17:13:27

2   (Exhibit 40 was marked for identification

3   and is attached hereto.)

4 BY MR. FERRALL:

5   Q Okay. We just marked as Exhibit 40 an   17:13:32

6 email bearing control numbers CSI-CLI-00746398. It

7 appears to be between you and a Craig Fox, among

8 others.

9   And I guess my only question for you,

10 Mr. Lougheed, is do you have any reason to believe   17:13:57

11 that you didn't send this email that's Exhibit 40?

12   A It looks like I sent it. I have not had a

13 chance to read it.

14   Q Are you on the Parser Police mailing list?

15   MR. NEUKOM: Objection. Vague.   17:14:36

16   THE WITNESS: At one point I was.

17 BY MR. FERRALL:

18   Q For what period of time were you on that

19 mailing list?

20   A I don't -- I don't remember a time period,   17:14:56

21 but it has been many years since I have been on that

22 mailing list.

23   Q Are you on the Fellows mailing list?

24   MR. NEUKOM: Objection. Vague.

25   THE WITNESS: I'm on -- I've been on   17:15:32

Page 158

Page 160

---

18   I've answered the question to the best of

19 my ability.

20   MR. FERRALL: Okay. All right. Let's go   16:53:22

21 off the record.

22   THE VIDEO OPERATOR: Going off the record,

23 the time is 4:53 p.m.

24   (Recess, 4:53 p.m. - 5:13 p.m.)

25   THE VIDEO OPERATOR: Back on the record.   17:07:48

Page 159

1 various mailing lists that have included Cisco   17:15:33

2 Fellows.

3 BY MR. FERRALL:

4   Q Can you tell me which ones those are, to

5 the best of your knowledge?   17:15:44

6   A To the best of my knowledge, there was

7 a -- an older mailing list called Fellows@cisco.com.

8 More recently there's a mailing list called

9 DE-Fellows-Meeting-Attendees.

10   Q And you've been on both of those?   17:16:05

11   A Yes.

12   Q I don't have any other questions about

13 that.

14   A Okay. I rather liked what I wrote.

15   Q Tell me what a loopback is. Are you   17:16:35

16 familiar with that term?

17   A It's a term -- I believe it originated in

18 electronics, certainly in pieces of hardware, where

19 you can take the output signal of a device and put

20 it into -- to input and see if it receives it   17:17:18

21 correctly.

22   It tests the internal state machine of

23 whatever entity you're testing.

24   Q When did you first hear it used in the

25 networking context?   17:17:35

Page 161

41 (Pages 158 - 161)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

1   Q How did you choose the term -- the words   18:13:39
2 "timers basic" for this function?
3   A I don't remember where "basic" came from.
4 But using the keyword "timers" was my -- was my
5 introduction, was my creation.   18:14:00
6   MR. NEUKOM: Counsel, I believe we're now
7 beyond seven hours.
8   MR. FERRALL: Okay. Well, I -- given
9 Mr. Lougheed's tenure at Cisco, I thank him for his
10 time, but I will say I think we deserve some more   18:14:22
11 time with him.
12   But I understand seven hours is up and
13 you're going to say enough is enough for today I
14 take it; is that right?
15   MR. NEUKOM: Certainly for today for the   18:14:31
16 sake of the witness. And we will respectfully
17 disagree with the idea that counsel needs more than
18 seven hours --
19   MR. FERRALL: Okay.
20   MR. NEUKOM: -- needs more than today.   18:14:41
21 But we can discuss that for another day.
22   In the meantime, I should note for the
23 record the witness reserves the right to review the
24 transcript and make corrections.
25   Brian, I'm not sure I did that for   18:14:51

Page 186

1 Mr. Tjong. If you're okay with it, I'd like to just   18:14:53
2 do a stipulation across the case that both sides
3 have the 30-day review and errata right for all
4 transcripts regardless whether counsel puts it on
5 the record at the depo as a two-way street.   18:15:04
6   MR. FERRALL: That's fine. I thought it
7 existed as a matter of procedure anyway. So that's
8 fine.
9   MR. NEUKOM: I hope you're right, but glad
10 to have the stipulation, even if it's unnecessary.   18:15:17
11   MR. FERRALL: Okay.
12   MR. NEUKOM: Thanks very much.
13   THE VIDEO OPERATOR: This concludes
14 today's videotaped deposition of Mr. Kirk Lougheed.
15 We're off the record at 6:15 p.m. Thank you.   18:15:25
16   (TIME NOTED: 6:15 p.m.)
17   --o0o--
18
19
20
21
22
23
24
25

Page 187

1
2
3
4
5
6
7
8   I, KIRK LOUGHEED, do hereby declare under
9 penalty of perjury that I have read the foregoing
10 transcript; that I have made any corrections as
11 appear noted, in ink, initialed by me, or attached
12 hereto; that my testimony as contained herein, as
13 corrected, is true and correct.
14   EXECUTED this _____ day of _____,
15 2015, at _____, _____.
16   (City)   (State)
17
18
19   _____
20   KIRK LOUGHEED
21
22
23
24
25

Page 188

1   I, the undersigned, a Certified Shorthand
2 Reporter of the State of California, do hereby
3 certify:
4   That the foregoing proceedings were taken
5 before me at the time and place herein set forth;
6 that any witnesses in the foregoing proceedings,
7 prior to testifying, were administered an oath; that
8 a record of the proceedings was made by me using
9 machine shorthand which was thereafter transcribed
10 under my direction; that the foregoing transcript is
11 a true record of the testimony given.
12   Further, that if the foregoing pertains to
13 the original transcript of a deposition in a Federal
14 Case, before completion of the proceedings, review
15 of the transcript [X] was [ ] was not requested.
16   I further certify I am neither financially
17 interested in the action nor a relative or employee
18 of any attorney or any party to this action.
19   IN WITNESS WHEREOF, I have this date
20 subscribed my name.
21
22 Dated: 11/25/2015
23
24
25   *Carla Soares*
         CARLA SOARES
         CSR No. 5908

Page 189

48 (Pages 186 - 189)